Appl. No.:

10/700,167

Response dated November 13, 2006

Reply to Office Action of September 13, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (cancelled).

Claim 2 (currently amended): A metalworking lubricant composition comprising:

- A) at least one lubricating oil; and
- B) at least one base-catalyzed branched reaction product comprising the following reactants:
 - a) at least one compound of formula I

$$R^1(X)_3 \qquad \qquad (I)$$

wherein each X group is a halogen atom or one X group is a halogen atom and two X groups represent an epoxy oxygen atom, which is attached to two adjacent carbon atoms in the R¹ group to form an epoxy group, and R¹ is an alkanetriyl group containing from 3 to 10 carbon atoms; and

b) at least one compound having the formula II

$$R^2X(AO)_nY$$
 (II)

wherein R² is a substituted or unsubstituted, saturated or unsaturated, organic group having from 1 to 36 carbon atoms; X is –O–, –S–, or –NR³– where R³ is hydrocarbon or a C₁-C₁₈ alkyl group; each AO group is independently an ethyleneoxy, 1,2-propyleneoxy, or 1,2-butyleneoxy group, n is a number from 0 to

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200; and Y is hydrogen, or Y can be a mercapto group or an amino group or a C_1 - C_6 alkyl amino group in place of a terminal –OH group, provided that when Y is mercapto or an amino group or a C_1 - C_6 alkyl amino group, n is at least 1;

wherein the mole ratio of the linking compound a) to b) is from 0.1:1 to 5:1wherein the metal working lubricant composition has reduced foaming properties in aqueous and nonaqueous metal working formulations and improved lubricating and extreme pressure properties and, wherein, R² is optionally substituted with a member selected from the group consisting of mercaptan functionably, thio functionably, amine functionably, amide functionably, alcohol functionably, silicone functionably, ether functionably, and combinations thereof.

Claim 3 (currently amended): An aqueous electroplating composition comprising:

- A) at least one metal or metalloid; and
- B) at least one base-catalyzed reaction product comprising the following reactants:
 - a) at least one compound of formula I

$$R^1(X)_3 \qquad \qquad (I)$$

wherein each X group is a halogen atom or one X group is a halogen atom and two X groups represent an epoxy oxygen atom, which is attached to two adjacent carbon atoms in the R¹ group to form an epoxy group, and R¹ is an alkanetriyl group containing from 3 to 10 carbon atoms; and

b) at least one compound having the formula II

$$R^2X(AO)_nY$$
 (II)

wherein R² is a substituted or unsubstituted, saturated or

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unsaturated, organic group having from 1 to 36 carbon atoms; X is -O–, -S–, or $-NR^3$ – where R^3 is hydrogen or a C_1 - C_{18} alkyl group; each AO group is independently an ethyleneoxy, 1,2-propyleneoxy, or 1,2-butyleneoxy group, n is a number from 0 to 200; and Y is hydrogen, or Y can be a mercapto group or an amino group or a C_1 - C_6 alkylamino group in place of a terminal -OH group, provided that when Y is mercapto or an amino group, or a C_1 - C_6 alkylamino group, n is at least 1;

wherein the mole ratio of component a) to b) is from 0.1:1 to 5:1, and wherein the base catalyzed reaction product is not epoxy functional and provides improved brightening and reduced foaming and, wherein, R² is optionally substituted with a member selected from the group consisting of mercaptan functionably, thio functionably, amine functionably, amide functionably, alcohol functionably, silicone functionably, ether functionably, and combinations thereof.